

# Soil & Water Conservation MONTANA

1967-1968 REPORT

by State Soil Conservation Committee





# MONTANA STATE SOIL CONSERVATION COMMITTEE

BI-ANNUAL REPORT

of the

STATE SOIL CONSERVATION COMMITTEE

JUNE 30, 1968

TIM BABCOCK GOVERNOR STATE OF MONTANA

WILLIAM F. D'EWART
CHAIRMAN
MONTANA STATE SOIL CONSERVATION COMMITTEE



#### STATE OF MONTANA

# STATE SOIL CONSERVATION COMMITTEE

MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY
BUTTE, MONTANA

BUTTE, MOI 59701



OFFICERS

September 2

WM. F. D'EWART

DEAN A. HANSON

O. M. UELAND EXECUTIVE SECRETARY MONTANA TECH. BUTTE, MONTANA PHONE 792-0971

BOZEMAN, MONTANA

J. A. ASLESON
BOZEMAN, MONTANA
WM. F. D'EWART
WILSALL, MONTANA
DEAN A. HANSON
GILDFORD, MONTANA

MEMBERS

ORLIEF C. AASHEIM

OSCAR HIPPE FROID, MONTANA A. V. LINFORD

BOZEMAN, MONTANA
C LOWELL PURDY
HELENA, MONTANA
JOHN M. SCHROEDER

Honorable Tim Babcock Governor, State of Montana State Capitol Building Helena, Montana

Dear Governor Babcock:

We are pleased to submit the bi-annual report of the Montana State Soil Conservation Committee, covering accomplishments for the State Soil Conservation Committee and the Montana Soil and Water Conservation Districts for fiscal years ending June 30, 1967 and June 30, 1968, together with recommendations for the forthcoming biennium.

Sincerely,

William & D Wart
William F. D'Ewart

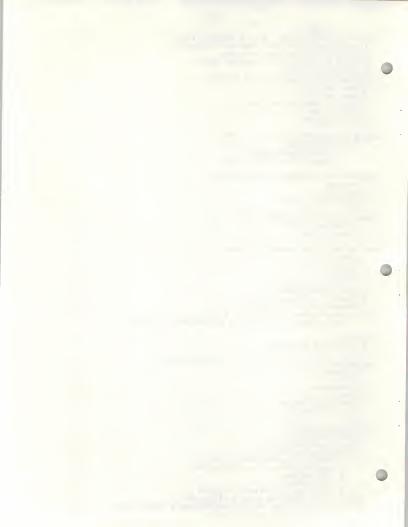
Chairman





# INDEX

CONTENTS	PAGE NO.
Soil & Water Conservation Districts Recommendations	
1. Amendments to SWCD Law - Permissive Legislation	1
2. Conservation Education Coordinator	1
3. State Soil Conservation Committee Budget	2
4. Watershed Planning	2
5. Construction Funds for Water Projects	3
6. Weed Control	3
7. Soil Fertility	3
8. Zoning - Land Use Planning	3
9. Strip Mining	3
10. Mining Claims	3
Soil & Water Conservation District Law	4
1. 1967 Legislation	4
a. Urban Representation	4
b. County Water District Law	5
Montana State Soil Conservation Committee	5
1. Members	5
2. Meetings	6
3. Out-of-state travel	7
Executive Secretary's Office - SSCC	7
1. Office and Staff	7
2. Service Given	7 & 8
a 11 - 1 Victor Conservation Districts	8
Soil and Water Conservation Districts	9
1. Area Covered	ģ
2. Supervisors	ģ
3. Financing 4. Conservation Programs	11
5. Long Range Programs	11
6. Annual Work Plan & Reports	11
7. Montana District Statistics	28 & 29
8. Practices Accomplished in 1967 & 1968	27
Soil & Water Conservation - A Big Business in Montana	
C. combana	12
Cooperators  1. Agreements and Plans	12
1. Agreements and Flans	
Montana Association of Soil & Water Conservation Districts	13
1. Purpose	13
2. Officers	13
3. Committees	13
4. Activities	13
5. Work-Study Program	14
6. District Outlook	14
Cooperating Agencies	15
1. Extension Service	15
2. Soil Conservation Service	15
a. Technical Assistance	15
b. Great Plains Conservation Program	16
c. Resource Conservation & Development	16
d. Snow Surveys	16
e. Soil Surveys	17
f. Public Law 566 Watershed Projects	17 23
3. ASCS, Water Resources Board, & Fish & Game	23
4. State Forester, Dept. of Public Instruction & Highway Dept.	25

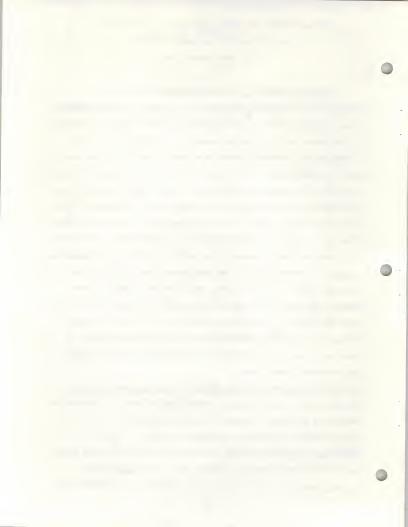


#### BIENNIAL REPORT TO THE GOVERNOR AND THE LEGISLATURE OF MONTANA of the MONTANA STATE SOIL CONSERVATION COMMITTEE

Fiscal Years 1967 and 1968

#### RECOMMENDATIONS OF SOIL AND WATER CONSERVATION DISTRICTS

- 1) Amendments to Soil & Water Conservation Districts Law Permissive Legislation There is need for broader district financing for districts to meet the demands of local people for Total Resource Development through districts. It is recommended that permissive legislation be passed by amending the Soil and Water Conservation Districts Law so that Soil and Water Conservation Districts can better be able to finance the planning of their various programs, and to build and maintain resource development projects of any kind under the total resource development concept. Such projects may include range renewal, recreation, multipurpose water developments, Resource Conservation and Development. etc. There are potential projects about ready to make use of this legislation if passed. At present, the Soil and Water Conservation Districts Law provides the authority to build projects, but is lacking in financing power comparable to those of other special purpose districts, namely taxing, bonding, and eminent domain. The districts should be able, if the people concerned desire, to match federal cost-sharing or grants which are designed for district use, such as under the Public Law 566 Program and Resource Conservation and Development Program.
- 2) Conservation Education Coordinator, Planning Specialist, Public Relations
  Compared to other state agencies, it appears that the State Soil Conservation
  Committee is very much understaffed. In order to properly assist Soil and
  Water Conservation Districts as provided by law, there is need for a
  conservation education coordinator to assist districts and schools in their
  conservation education programs; there is need for a program planning
  specialist to assist districts in planning, promoting, and coordinating their



local resource programs in water, range, recreation, forestry, wildlife, land use, etc; there is need for a <u>public relations specialist</u> to assist districts in a wide range of resource information to the public. This is not duplication of state effort. The State Soil Conservation Committee and Soil and Water Conservation Districts need the above personnel to get the job done at the <u>local level</u> with the necessary contact and communication with specialized state and federal agencies. The Executive Secretary, in addition to his administrative duties, works in the above areas, but it is physically impossible for one man to do the whole job.

# 3) State Soil Conservation Committee Budget

It is recommended that \$44,232.00 be appropriated for the 1969-1971 biennium for personal services as against \$25,500.00 for the present biennium. This will allow for a Conservation Education Coordinator as mentioned in item 2, and a more realistic salary for Executive Secretary and Office Secretary.

# 4) Watershed Planning Budget

It is recommended that \$100,000 a year be appropriated to the State Soil Conservation Committee for Watershed Planning. The State Soil Conservation Committee submits that the Public Law 566 Program offers the best opportunity for small and medium-size project water development in Montana if properly supplemented by state and local funds. Currently, there is about \$100,000 a year federal planning funds available supplemented by \$50,000 a year of state funds, which are being fully utilized. This should be continued. On the basis of federal P. L. 566 appropriations, \$1,400,000 a year or more of construction cost-sharing funds should be available to Montana, most of which at present is utilized in other states. (Cost-sharing can be provided up to 50% for irrigation water management, 50% for recreation, and 100% for flood control.) Why aren't these construction funds fully utilized? One reason is lack of planning and the projects remaining to be built are relatively high

cost for present day Montana uses as against what users in neighboring states (who would like our water) can afford to pay.

# 5) Construction Funds for Water Projects

It is recommended that the legislature appropriate funds for building of multipurpose water projects for loan to local legal entities interest-free on a 40 year repayment basis. (We suggest \$1,000,000 a year for loan, possibly be maintained on a revolving fund basis.) The interest-free feature would partially represent the indirect beneficiary contribution. (Research on certain Montana water projects show that for every dollar the irrigator realizes, the businessman receives \$1.27.)

#### 6) Weed Control

Weed control legislation generally as outlined by the Montana Weed District Association and the State Rural Area Development Committee should be passed.

# 7) Soil Fertility

The Soil Fertility Program as recommended by the Rural Area Development Committee to provide funds for Extension Service Montana Experiment Station is recommended.

# 8) Zoning - Land Use Planning

Legislation being proposed for city-county planning and zoning should consider best land use. Agriculture uses should be protected.

# 9) Strip-Mining

Legislation requiring reclamation of strip-mined lands should consider the conserving and stockpiling of top soil. Good top soil is a valuable resource that needs be preserved for use of present and future generations.

# 10) Mining Claims

It is recommended that state and federal laws be amended that required prospecting and assessment work for minerals be by methods which will cause least damage to the land.

#### SOIL AND WATER CONSERVATION DISTRICTS LAW

Reference is made to the Montana Soil and Water Conservation Districts Law (76-101 through 76-117 and 76-201 through 76-219, Revised Codes of Montana, 1947) — wherein the legislature has declared it to be policy to provide for the conservation of soil and water resources of this state, for the control and prevention of soil erosion, for the prevention of floodwater and sediment damages, for furthering the conservation, development, utilization, and disposal of water, thereby to preserve natural resources, control floods, prevent impairment of dams and reservoirs, preserve wildlife, protect the tax base, protect public lands and protect and promote the health, safety and general welfare of the people of this state.

To carry out the above policies, the Soil and Water Conservation District

Law provides for the creation of Soil and Water Conservation Districts under the
administration of a State Soil Conservation Committee. Reference is also made to
the duties and powers of the State Soil Conservation Committee and Soil and Water
Conservation Districts.

#### 1967 Legislation Beneficial

#### Urban Representation

The 1967 Legislature amended the Soil and Water Conservation Districts Law to require that two urban members be on each Board of Soil and Water Conservation District Supervisors where incorporated cities or towns are included with the district boundaries. As of June 30, 1968, the towns of Drummond, Big Sandy, and Ennis were included within their Soil and Water Conservation Districts.

Referendums have been held in Fort Benton, Geraldine, Hysham, Broadus, Wibaux, and Harlowton; all passed with a very favorable vote. As this is written, the cities and towns of Jordan, Lewistown, Miles City, Philipsburg, Twin Bridges, Sheridan, Hardin, Three Forks, Eureka, and Conrad have submitted petitions. This makes a total of 19 towns that have taken advantage of this legislation and many more are in prospect.

Inclusion of municipalities within Soil and Water Conservation Districts and urban representation insures: 1) that districts represent all the people and all community interests in ascertaining conservation needs and responding to their desires; 2) develop conservation and resource development programs for all of the people; 3) involve all the people through appropriate representation in the decision-making process relating to natural resource conservation and development; and 4) all will accept and carry out responsibilities in connection with resource programs and projects.

#### County Water District Law

In addition to amending the Soil and Water Conservation Districts Law, the

1967 Legislature amended the County Water District Law and the County and Municipal

Flood Control Law to permit construction and maintenance of multipurpose water

development projects under these laws. This has been a big help to the Public

Law 566 Watershed Program. Lewistown, Columbia Falls, Shelby, Havre, and Newlan

Creek Water Users have organized under these acts to build projects.

# THE MONTANA STATE SOIL CONSERVATION COMMITTEE

#### Members

As of June 30, 1968, farmer members appointed by the Governor are William F. D'Ewart, Chairman, Wilsall, term expires January 1, 1969; Dean A. Hanson, Vice-Chairman, Gildford, term expires January 1, 1972; John M. Schroeder, LoLo, term expires January 1, 1971; and Oscar B. Hippe, Froid, term expires January 1, 1970.

Ex-officio members are Torlief S. Aasheim, Director of Extension, Joe Asleson, Director, Montana Experiment Station, and C. Lowell Purdy, Commissioner of Agriculture. Ave Linford, Soil Conservation Service State Conservationist, is the U. S. Department of Agriculture representative and an advisory member. O. M. Ueland is hired as Executive Secretary and Administrative Officer.

#### Meetings

The Committee held ten meetings in the period reported. Two meetings were held in Lewistown; five meetings in Helena; one meeting in Glendive; one meeting in Butte; and one meeting in Bozeman.

Water developments on the watershed program and petitions for urban representation on Soil and Water Conservation Districts Boards of Supervisors have dominated most meetings. A Beartooth Resource Conservation and Development Application, comprising Carbon and Stillwater Counties, and a Headwaters Resource Conservation and Development Application, comprising Silver Bow, Deer Lodge, Jefferson, and part of Powell and Madison Counties, were received and endorsed.

The Montana Association of Soil and Water Conservation Districts President attended all meetings, and coordination of activity with that Organization has been maintained. Representatives of Agricultural Stabilization and Conservation Service, Water Resources Board, Fish & Game, State Highway Department, State Department of Planning and Economic Development, Clay Brinck, Montana Water Pollution Council, and Dr. Leon Johnson, President of Montana State University, Bozeman have attended State Soil Conservation Committee meetings to discuss mutual conservation matters. The Committee met with Governor Babcock on several occasions.

Representatives of Sidney Water Users Watershed, Hinsdale Water Users, Sand Coulee, and Carbon Hills Watersheds met with the State Soil Conservation Committee relative to progress of their project.

Delegations for watershed applications appeared before the Committee from

Deer Lodge for the Tin Cup Joe, and from Browning for the City of Browning. Applications were received for Two Leggins Watershed in Hardin, Pat ee Creek and Miller

Creek in Missoula, and Camp Creek in Bozeman. A re-application was received from
the Brown's Gulch Watershed in Butte. (A further report on Watershed Applications

appears on Page 17 of this report.)

#### Out-of-State Travel

The Secretary attended the annual meeting of Western States Soil & Water
Conservation Committees, Commissions, or Boards at Park City, Utah in 1967. ViceChairman Hanson attended the annual National Association of Conservation Districts
meeting in Cincinnati, Ohio in 1967, and the Secretary and Chairman D'Ewart
attended the NACD Meeting in Dallas, Texas in 1968, as did Oscar Hippe who
represented the Montana Association of Soil and Water Conservation Districts as
its Councilman. The Secretary attended an NACD Public Lands Meeting in Denver,
Colorado and a seminar on District Outlook at Omaha, Nebraska. Oscar Hippe
attended the NACD Northern Great Plains Area Meeting at Bismarck, North Dakota
in June, 1968.

# EXECUTIVE SECRETARY'S OFFICE - STATE SOIL CONSERVATION COMMITTEE

Office and staff of the State Soil Conservation Committee is located at Montana College of Mineral Science & Technology in Butte. O. M. Ueland has been employed as Executive Secretary and Administrative Officer since July 1, 1961. His office staff consists of one office secretary.

# Services Given

The Secretary held workshops with Districts in 1968 concerning district operations. Total Resource Development and Financing of Conservation were the prime topics at the 1968 meetings. The Secretary makes up guidelines and gives counsel to the districts on their long range programs, annual work plans, and annual reports. Much follow-up is required to make these effective instruments to the supervisors and to the agencies which give assistance.

Many calls and conferences are held, as time permits, with Extension, State Forester, Soil Conservation Service, Agricultural Stabilization Conservation, State Fish & Game, Water Resources Board, U. S. Forest Service, Bureau of Land

Management, and other agencies having conservation responsibilities.

The Secretary serves on various committees, among them Rural Area Development, Great Plains, Conservation Needs, Governor's Advisory Committee on Outdoor Recreation, Montana Woodland Council, Plant and Soil Science Advisory Committee, Weed Control and has attended or participated in the following organization meetings having conservation or natural resource activities: State Agricultural Stabilization Conservation Committee on Agricultural Conservation Program Development, Montana Water Development Association, Montana Water Congress, Range Society, Montana Conservation Council, Conservation Education Association, Montana Association of Soil and Water Conservation Districts Conventions, Montana Association of Soil and Water Conservation Districts Area Meetings, NACD Public Lands Committee. Also, several annual meetings of districts, Montana Farm Bureau Convention, Montana Farmers Union Convention, Montana Stockgrowers Convention, Woodland Council, and Montana Natural Resources Council of State and Federal Agencies.

The Executive Secretary represents the State Soil Conservation Committee on the State Council of Natural Resources and Development.

The Secretary edits "Treasure Acres" which is financed jointly by the Montana Soil and Water Conservation Districts Association and the State Soil Conservation

Much time is spent holding hearings and referendums for additions of municipalities to districts, and doing public relations and conservation education activity.

# SOIL AND WATER CONSERVATION DISTRICTS

The State Soil Conservation Committee and its Executive Secretary works closely with districts and keeps on file all official proceedings of districts.

#### Area Covered

There are 58 Soil and Water Conservation Districts in Montana. These include all of Montana, with the exception of a part of Custer and Prairie Counties. All of Prairie County is included within a Grazing District, which does a commendable job, similar as a Soil and Water Conservation District. Most districts are organized by counties with county boundaries. They are legal subdivisions of the state. Supervisors

Each district has five elected supervisors who serve without pay. Districts with cities or towns have in addition two urban supervisors. Most district supervisors meet monthly. Most have good programs outlined, but many fail to carry them out because of lack of finances or help.

# Finances

About 40 districts receive varying amounts of funds up to \$1,000 a year for district operations from County Commissioners. (State law allows 1/2 mill levy on all real property outside of incorporated cities and towns, not to exceed \$1,000 a year.) A total of \$28,177.30 was received by districts in 1966; \$33,254.66 was received in 1967. In addition, some districts receive revenue from operation of equipment, service to contractors, and profits from sale of conservation materials, such as pipe, trees, etc.

The State and local governments must give more financial support to make state programs more effective. Montana ranks near the bottom of all the states in financial support it gives these vital resources, soil and water, and it is a big state areawise. Montana ranchers and farmers protect these resources very well; however, the conservation needs inventory shows much opportunity exists, particularly for better range and water management and for cropland improvement, together with such things as recreation and beautification programs, which in turn is Montana best bet for substantial economic development.

A quote taken from an article from Peter V. Jackson, President of the Montana Association of Soil and Water Conservation Districts is as follows:

"It is an undisputed fact that the districts now have a huge responsibility. The easiest way to see just how large the responsibility really is, is to read the Soil and Water Conservation District Law. In the years just past, these awesome charges were passed over as something to be reckoned with in the future. The time has arrived where the demands of a world are coupled with spreading suburbia, airports, factories, highways, and recreation areas. We aren't just independent agrarian people working in our fields -- the true example of free enterprise. Now, all these factors are crowding in on us and demanding that we perform our task of making sure that the natural resources of soil and water are preserved and made to produce what is needed today and to meet our standard of

"One final fact of life - there will be no turning back to the good old days. This is impossible. Likewise, the same good old days of our districts are gone. But this isn't bad. In fact, it's good, even exciting to think that we are really that important to all the other people and they must be so dependent on us.

living.

"The one satisfying thing about all this is that we are already getting underway. If we are able to get the new additions and changes put into our District Law, we will be able to do our part in conservation in the manner required of us."

#### Conservation Programs

District programs cover many phases of activity connected with soil and water conservation. These activities are listed below:

Conservation Planning Soil Improvement & Management Range Management

Water Management

Woodland Management - Forestry Irrigation Field Crops - Cropland Management

Recreation

Fish & Game Soil Erosion Prevention Watershed Programs

Underground Water

Great Plains Program

Agricultural Conservation Programs Public Lands Programs

Rural-Urban Planning Highway Construction Reclamation of Mined Lands

Industrial Development Pollution Control of Water & Air Beautification

Weed Control Fire Control Insect Control

Madison County Soil and Water Conservation District, which is a typical Montana District, lists their program as follows: Erosion control, water management and use, soil fertility, vegetation management and the best land treatment for its protection and improvement, recreation and wildlife management.

In developing a conservation program in such a broad area, supervisors necessarily have to concern themselves with research, conservation education, technical help, public relations, finances, legislation, and cooperation.

By means of Memorandums of Understanding or other appropriate agreements, districts obtain help from Soil Conservation Service, the Extension Service, the Agricultural Stabilization and Conservation Service, and other agencies with conservation responsibilities.

# Long Range Programs, Annual Plans, and Annual Reports

Forty-nine districts have revised their long range programs to reflect new conditions, the broad concept of total resource development, and to take advantage of new research and assistance which is available. These programs include plans for conservation and development of all related natural resources within their district. Legislators should be acquainted with their district's programs. District supervisors sign agreements with farmer or rancher cooperators whereby

planning can be given them, plus engineering and contractor servie as available.

This is all voluntary.

All districts develop: 1) A long range program; 2) an annual plan of work; and 3) an annual report.

Most districts have annual meetings which the public is invited to attend.

These meetings are for the purpose of electing supervisors and acquainting people with the district program. District supervisors are to be commended for the guidance they give agencies so that public funds are wisely used. Supervisors are also to be commended for the leadership they give in inspiring their fellow man in conservation. (Montana District Statistics are given on Pages 28 and 29 of this report.)

#### COOPERATORS

Regardless of all the valuable assistance that may be rendered, a conservation program would be nothing but failure without the cooperator. The cooperator is the farmer or rancher or land occupier who puts the program into action. In other words, the cooperator is the engine that sets up the moving part of the entire program.

#### Agreements and Plans

There are  $\underline{14,441}$  farmers and ranchers out of  $\underline{26,994}$  who are cooperators of Soil and Water Conservation Districts. This represents  $\underline{39,854,846}$  acres of a total of  $\underline{60,611,125}$  acres under private ownership or  $\underline{66\%}$ .

They have signed agreements with districts to prepare and follow a plan for using their land within its capability and to treat it according to its needs. A big bottleneck is the lack of technical help. Farm and ranch plans need constant revision and follow-up and more cooperators would like assistance.

Cooperators are enthusiastic about the help they receive - technical, educational, and cost-sharing. Estimates have been made in several districts of the returns on soil and water conservation expenditures. In these estimates, farm and ranch income has been increased to three-to-four times. This increased income benefits all of the people, and at the same time establishes an improved basic resource for continued benefits. (See Montana District Statistics, and Practices Accomplished in 1967 - Soil & Water Conservation - A big Business on Pages 27, 28, & 29 of this report.)

# MONTANA ASSOCIATION OF SOIL & WATER CONSERVATION DISTRICTS

# Purpose

This is an independent organization of Soil and Water Conservation District Supervisors, organized to plan, promote and consummate a comprehensive system of soil and water conservation through Soil and Water Conservation Districts for the entire State of Montana. To that end, they cooperate with the State Soil Conservation Committee and other organizations working for the same objectives.

# Officers

Officers at the time of this report are Peter V. Jackson, President, Harrison; Carl Johnson, Vice-President, Livingston; Wayne Gibson, Secretary, Bozeman; and Wendell Martinell, Treasurer, Butte. There are twelve directors from six areas of Montana and two directors are at large.

# Committees

Standing Committees include Program and Research, Education, Budget & Finance, Legislative, Public Relations. Subcommittees are Water Resources, Public Lands, Farm Forestry, and Recreation, Wildlife, and Beautification.

#### Activities

The Association has an annual convention. In 1966 it was held in Glendive when the theme was "Conservation Education". In 1967 the convention was held in Butte when the theme was "Soil and Water Conservation - What Does It Mean?"

Notable Association activities the past year have been to publish Treasure

Acres, bi-monthly news bulletin, seek legislation to assist districts, support

conservation programs in Congress, the promotion of watershed projects, conservation education, and a study of proposed revision of the Soil and Water Conservation Districts Law. The Association completed an inventory of existing recreation facilities and enterprises throughout Montana which they plan to use to

analyze and promote recreation as one of the multiple uses of soil and water on

private lands. This Association is also sponsoring an inventory of farm forestry

enterprises and facilities. A very thorough conservation research needs inventory

has been done.

Most Districts of Montana are dues paying members of the Montana Association as well as the National Association of Conservation Districts.

## Work-Study Program

The Association sponsored the Work-Study Program in 1968 whereby many Districts availed themselves of clerical and engineering help from students.

#### District Outlook

Of great significance to legislators and the Governor is a report of the NACD District Outlook Committee. This report states that Soil and Water Conservation Districts should be the bodies that:

- Represent all the people and all community interests in ascertaining conservation needs and responding to their desires.
- Develop conservation and resource development programs for all of the people.
- Involve all the people through appropriate representation in the decision-making process relating to natural resource conservation and development.
- Accept and carry out responsibilities, including the expenditures of local, state, and federal financial allocations on behalf of

all the people, in connection with resource programs and projects.

If we agree that this is the direction in which we wish to move, some changes will need to be made.

# COOPERATING AGENCIES

Inasmuch as the Committee has certain coordinating responsibilities with regard to soil and water conservation, representatives of various agencies having conservation responsibilities have been invited to its meetings:

# Montana Cooperative Extension Service

Torlief Aasheim, who is a member of the Committee, has assisted with the aid of extension specialists and county agents. Extension specialists who give some help in working with district programs are the extension economist, the extension forester, and extension weed specialist, wildlife specialist, and extension agronomist. Presently, there is no extension specialist for forestry or water management.

County Extension Agents act as secretary in many districts. County agents are depended on and do much work in assisting with conservation tours, contests, soil judging, schools, etc. and presenting information to various persons about the Soil and Water Conservation District Program.

# Soil Conservation Service, USDA

#### Technical Assistance

A. B. (Ave) Linford is the State Conservationist for the Soil Conservation

Service in the State of Montana and represents his agency on the State Soil Conservation Committee. The Soil Conservation Service provides technical assistance to land occupiers through Soil and Water Conservation Districts for complete resource development. Assistance is provided in the fields of agronomy, biology, range, woodland, soils, geology, engineering, hydrology, economics, plant materials, and recreation.

#### Great Plains Conservation Program

The Soil Conservation Service also administers the Great Plains Conservation Program in cooperation with Soil and Water Conservation Districts. The Great Plains Conservation Program is offered in thirty-seven eastern Montana counties—all that are eligible under the law. A farmer or rancher develops a conservation program for his operating unit, assisted by a Soil Conservation Service technician. The program is designed to meet the conservation needs of the unit. The Federal government, through the Soil Conservation Service, contracts with the farmer or rancher to apply the conservation measures on the land as provided in the plan. The Federal government provides cost—sharing assistance in applying most practices. The cost—sharing amounted to \$645,219 for fiscal year 1967 and \$668,814 for fiscal year 1968.

#### Resource Conservation and Development Projects

Resource Conservation and Development Projects are promoted and sponsored by Soil and Water Conservation Districts, with assistance from the Soil Conservation Service. This program operates under the concept of local people helping themselves. They develop their organization, select the projects to be pursued, and provide leadership. The Bitter Root RC&D went into operation on July 1, 1966. The first two years of this program has had a \$2,458,443 impact on the project area—Ravalli and part of Missoula Counties. Technical and financial assistance is provided by Federal, State and local agencies. Applications have also been received from Beaverhead County; Carbon and Stillwater Counties, known as the proposed Beartooth RC&D project; and from Silver Bow, Deer Lodge, Jefferson, and parts of Madison and Powell Counties, known as the proposed Headwaters RC&D Project.

#### Snow Surveys

Competition for water is increasing each year. To better use our water supply requires accurate information on how much water will be available up to

six months in advance of the actual runoff.

The Soil Conservation Service has responsibility for water supply forecasting and coordinating the cooperative snow surveys. Measurements are made at about 185 snow courses in Montana by many private, State and Federal agencies. These measurements provide the basic data from which water supply forecasts are made.

To improve forecast accuracy and obtain a current knowledge of conditions
"on the mountain" the Soil Conservation Service has begaun installation of a snow
pillow network. About 30 pillows are now in operation. Development and testing
of radio equipment to provide daily information is currently underway. Information
will be supplied to reservoir operators, flood forecasters, irrigators, and others
who need to know currently and accurately how much water can be expected.

# Soil Surveys

The Soil Conservation Service, in conjunction with the State Experiment Stations, provides soil surveys to Soil and Water Conservation District cooperators as a basis for their conservation program. Soil survey interpretations are made for land use decisions dealing with agriculture, zoning, road construction, building construction, septic tank fields, etc. The Soil Conservation Service is receiving many requests for soils information from city-county planning boards for land use planning and zoning. During the 1967 fiscal year, 1,659,987 acres were surveyed and during the 1968 fiscal year, 1,497,215 acres were surveyed. As of June 30, 1968, 21,858,169 acres have been surveyed in Montana. Soil survey reports have been published in Ravalli, Treasure, Wibaux, Judith Basin and the Upper Flathead Counties. Field work has been completed in Granite, Powder River and Yellowstone Counties, and the reports are in the process of being published.

#### Public Law 566 Projects

Public Law 566, the Watershed Protection and Flood Prevention Act, is administered by the Soil Conservation Service. Under this act, legally qualified local organizations, such as Soil and Water Conservation Districts, can get technical and financial help in planning and carrying out watershed projects. Watershed projects can be built for flood prevention, irrigation, drainage, recreation, municipal and industrial water supply (both present and future), and Fish and Wildlife development.

The State Soil Conservation Committee has been designated by the Governor as the State agency to receive applications for assistance under the Act. The Committee transmits approved applications to the Soil Conservation Service for technical assistance. Priorities for planning assistance are established by the Committee. Priorities are based on need, feasibility of the proposed project, and the ability of the local organization to carry out the project.

As of this date, three projects have been completed in Montana. They are
Lower Willow Creek Watershed in Granite County, the Box Elder Creek Watershed in
Sheridan County, and the Jawbone Creek Watershed in Wheatland County at Harlowton.
Construction of the City of Shelby Watershed in Toole County is nearly completed
and construction has been authorized for the Cedar Creek Watershed in Flathead
County.

Planning has been completed on the Beaver Creek Watershed in Hill County and the plan is now being reviewed by the Public Works Committees of the House and Senate. Approval is expected soon. In addition, planning on the Big Spring Creek Watershed in Fergus County is nearing completion. This plan will be ready for Congressional review by November, 1968.

These projects range all the way from single purpose flood prevention and irrigation to the proposed structure on Beaver Creek in Hill County which will store water for recreation, irrigation, fish and wildlife development and flood prevention.

As of June 30, 1968, the State Soil Conservation Committee has approved 52 watershed applications covering an area of 4,046,948 acres. The location, size

and status of these applications are shown on the following map.

The Soil Conservation Service provides technical assistance to the local organizations to plan and construct these projects. Upon completion, the projects are owned and operated by the sponsoring local organization.

Planning assistance from the Soil Conservation Service is provided primarily by the Watershed Planning Party, a staff of specialists in engineering, hydrology, economics, geology and surveying.

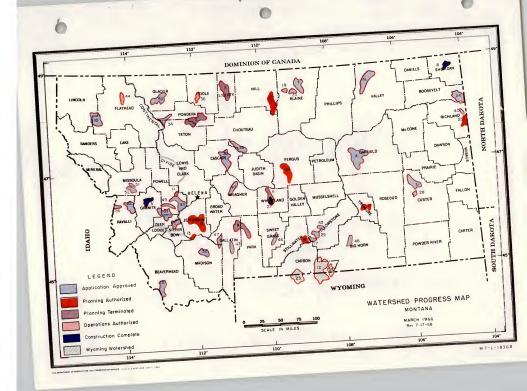
The 1967 Legislature appropriated \$100,000 to the State Soil Conservation Committee to help the Soil Conservation Service maintain this watershed planning party. In addition, the 1967 Legislature amended two laws which enabled local organizations to more easily meet their obligations as watershed sponsors.

The County Water and Sewer Districts Law (16-45 RCM) was amended to provide for multiple purpose water resource development. The sponsors of the Newlan Creek Watershed have organized under this law and other groups are in the process of organization.

The County and Municipal Participation Law (89-33 RCM) was also amended to provide for multiple purpose projects. The sponsors of the Cedar Creek Watershed at Columbia Falls, the Beaver Creek Watershed near Havre, and the Big Spring Creek Watershed at Lewistown are all proceeding under the provisions of this law.

These are examples of the water resource development opportunities that can be created by the enactment of progressive legislation.

Water in Montana is a much discussed resource. Conflicts in the use and disposal of water between agricultural, recreational, municipal, and industrial interests are resolved in watershed planning. These interests can then join to build multipurpose projects that maximize the benefits to all concerned with a minimum of expenditures.



# MONTANA WATERSHEDS

Number	Watershed	ATERSHEDS	
	watersiled	County	Aan
1.	Browns Gulch		Acres
2.	Cottonwood Creek	Silver Bow	50,000
3.	Pondera Creek	Liberty	130,000
4.	Upper Big Drv	Pondera & Teton	105,000
5.	Lower Willow Creek	Garfield	220,000
6.	Antelope Creek	Granite	71,200
7. 8.	Thirty Mile	Wheatland	91,300
	Box Elder Creek	Blaine	114,000
9.	Flathead Creek	Sheridan	14,285
10. 11.	Pleasant Valley	Gallatin & Park	87,000
	Three Mile	Flathead	129,300
12. 13.	Sage Creek-Pryor Mountain	Powel1	14,000
14.	will cenal I	Carbon & Big Horn	244,300
15.	Boulder River	Jefferson	10,200
16.	Medicine Lodge Creek	Jefferson	227,000
	Hysham Bench	Beaverhead	109,000
17.	Park City-Laurel	Treasure	7,000
18. 19.	Valley Creek	Yellowstone	29,000
	Fort Belknap	Stillwater	58,000
20.	Paradise	Blaine	9,000
22.	Racetrack Creek	Blaine	11,500
23.	Burnt Fork	Powell & Granite	55,700
24.	Crooked Creek	Ravalli	66,600
25.	Shotgun Creek	Carbon	83,800
26.	Cyclone Bar	Roosevelt	154,900
27.	Bear Creek	Carbon	119,400
28.	Jawbone	Ravalli	25,060
29.	Carbon Hill	Wheatland Custer	1,400
30.	Cove Creek		5,860
31.	Sand Coulee	Yellowstone	6,000
32.	Kinsey Flats	Cascade Custer	120,000
33.	Meadow Creek	Madison	27,000
34.	Little Blackfoot	Powell	50,000
35.	Birch Creek		48,000
36.	Sidney Water Users	Pondera & Teton Richland	100,000
7.	City of Shelby	Toole	15,000
8.	Beaver Creek	Hill	3,460
9.	Highwood	Chouteau	75,000
0.	Big Spring Creek	Fergus	142,700
1.	Newlan Creek	Meagher	96,000
2.	Willow Creek	Valley	53,273
3.	Alkali Creek	Yellowstone	211,800
4.	Bozeman Creek	Gallatin	14,900
5.	Cedar Creek	Flathead	133,000
6.	First Hay Creek	Richland	17,812
7.	Lower Deer Creek	Sweetgrass	157,130
3.	Camp Creek	Gallatin & Madison	36,900
9.	Two Leggins Canal	Big Horn	52,544
),	Tin Cup Joe Creek	Powel1	151,040
	City of Browning	Glacier	173,485
	Miller Creek Pattee Creek	Missoula	79,059
	Taccee Creek	Missoula	28,800
			10,240

The following table shows the three projects that have been constructed in Montana, the two that are under construction and those projects which could be under construction by 1970. The table also shows the expenditure of Public Law 566 construction funds in Montana, total structural costs, sustained annual economic impact of each project, and their accumulative impact.

	PL-566 Construction	Total Structural	Sustained Annual Economic Impact		
Watershed	Funds	Costs	Per Project	Accumulative	
Constructed					
Lower Willow Creek Box Elder Creek Jawbone Creek	\$ 320,000 315,000 43,825	\$ 800,000 434,616 65,610	\$ 61,910 100,080 7,570	\$ 61,910 161,980 169,550	
Under Construction					
City of Shelby Cedar Creek	248,500 229,000	445,730 375,000	204,390 52,040	373,940 425,980	
Planned					
Beaver Creek Whitehall	502,444 50,000	952,000 130,000	283,390 28,660	709,370 738,030	
Planning Underway					
Big Spring Creek Newlan Creek Sidney Water Users	1,100,000 400,000 230,000	1,500,000 1,000,000 540,000	160,000 140,000 96,000	898,030 1,038,030 1,194,030	
Carbon Hill	411,270	830,000	80,000	1,214,030	

Interest in the P. L. 566 Watershed Program is high and applications continue to come in faster than they can be serviced. The completed projects are convincing evidence of the success of the program and the benefits to be achieved. As more projects are completed, undoubtedly there will be more interest in the program. The Conservation Needs Inventory compiled by the Soil Conservation Service indicates a potential of approximately 250 small watershed projects in Montana.

Continued State assistance in financing the planning of these watershed projects is essential to maintain the momentum and provide for the acceleration of this program in Montana. To keep pace with the rate that the applications have been submitted and assure the continued development of needed multiple purpose projects would require additional financing of both the planning and construction phases of these projects.

# Agricultural Stabilization and Conservation (ASC) Committee, USDA

The Agricultural Stabilization and Conservation Committee administers the agriculture conservation cost-sharing program, and contributes greatly to the conservation of Montana's resources. This amounts to about \$5,000,000 per year in Montana. The State Soil Conservation Committee and Soil and Water Conservation District Supervisors participate in developing this program, which is generally parallel to that of the Soil and Water Conservation Districts.

# Montana Water Resources Board

A couple of meetings have been held with the State Water Resources Board. Some work for Memorandum of Understanding forms for use by Soil and Water Conservation Districts and the Water Resources Board has been done.

It is hoped that water conservation planning and development at the local level may be correlated with water conservation planning and development at the state level. In this respect, there is a need for "close-tie-in" of the State Soil Conservation Committee and the Water Resources Board. Areas needing close State Soil Conservation Committee-Soil and Water Conservation Districts-Water Resources Board consideration are in a state water plan, ground-water control, multipurpose water storage, and river basin planning.

The State Soil Conservation Committee-Water Resources Board-Soil Conservation

Service has worked closely on the Water Resources Board-Sidney Water Users Irrigation

Project, which is nearing reality under Public Law 566. The Boulder River and Hinsdale

Water Users proposed projects are also joint Water Resources Board-Public Law 566

endeavors.

# Montana Fish and Game Department

The Fish and Game Department has shown good working relations with Districts.

Some Memorandums of Understanding are being negotiated. There is recognition of
each other's programs in outdoor recreation development and promise of correlation
of private developments with public developments.

#### Montana Office of State Forester

All Soil and Water Conservation Districts have Memorandums of Understanding with the State Forester. A cooperative inventory of farm forestry service and facilities has been done. Tree seedlings are being supplied to cooperators through several district forestry programs.

The State Forester provides a service forester to the Eastern Sanders,

Green Mountain and Lake County Soil and Water Conservation Districts. A service
forester is also provided to the Bitter Root Resource Conservation and Development, which in turn is sponsored by the Missoula County and Bitter Root Soil
and Water Conservation Districts.

Prospects are for more intensive SWCD-State Forester farm forestry programs to include woodland management, farmstead and field windbreak plantings, and fire control.

# State Department of Public Instruction

State law requires that <u>Conservation</u> be taught in the schools as an integrated subject. A conservation education coordinator in the Department of Public Instruction is badly needed to get the right follow-through to assist local school administrators and teachers, to properly correlate the materials, and to satisfy the pressures of various agencies and groups with conservation responsibilities attempting to fill the vacuum of Conservation Education.

The State Soil Conservation Committee and Soil and Water Conservation Districts strongly recommend to the legislature and the Governor the appropriation of sufficient funds to meet this basic need.

# Montana State Highway Department

Work is being done by the Highway Department on roadside seeding and weed

control and some working relationships have been established by Soil and Water Conservation Districts and Highway Department. Consideration is being given to negotiating formal agreements to include conservation practices of zoning, planning, water improvement structures in combination with highway fills, seeding of roadsides, weed control, highway beautification. The State Highway Department has requested their District Engineer to explain the projected highway building program to Soil and Water Conservation Districts within their area. This is a start to consider the highway program and its contribution to total resource development.

# United States Department of Interior

Forty-two (42) districts have negotiated Memorandums of Agreement with the United States Department of Interior. Supplemental agreements have been or are in the process of being negotiated with the Bureau of Land Management, Bureau of Indian Affairs, Sports Fisheries and Wildlife, Bureau of Reclamation, Bureau of Outdoor Recreation. Good examples of joint ranch planning with the Soil Conservation Service and Bureau of Land Management technicians have developed in some Soil and Water Conservation Districts.

The State Soil Conservation Committee submits that Soil and Water Conservation Programs and Practices are progressing in Montana. Most Soil and Water Conservation District Boards of Supervisors are active. Much opportunity exists to further enrich ourselves by conserving and developing our soil and water resources. All who read this are encouraged to participate in and make use of their Soil and Water Conservation District.

Your State Soil Conservation Committee solicits your suggestions and comments.

As you drive about the countryside, observe if soil and water conservation is being practiced. Think about the food, the clothing, the housing and the recreation we enjoy. Then answer for yourself whether or not the dollars spent for conservation have been spent wisely.

It is the policy of the State Soil Conservation Committee and the Soil and Water Conservation Districts to work for a comprehensive, integrated, and coordinated overall conservation program, headed up by Soil and Water Conservation Districts at the local level. Needless to say, with the many state and federal agencies and the many citizens' organizations concerned with various concepts of conservation, this task is great.

The State Soil Conservation Committee and Soil and Water Conservation Districts are grateful to the Governor, and the Legislature for past recognitions.

Your continued support is solicited for future budgets and programs. Conservation District Supervisors are proud to merit your confidence.

#### A BIG BUSINESS IN MONTANA SOIL AND WATER CONSERVATION WORK

Fis			Year 1967		Fiscal Year 1968		
			Paid Out For		-	Paid Out E	or
			Materials & Work			Materials @	orl
Practice	Accomplishe	≥d	(Dollars)	Accomp1i	shed	(Dollars	5_
Seeding Practices							
Land Preparation	72,750 ac	. \$	582,000	59,482	ac.	\$ 475,856	
Seed	72,750 ac		400,125	59,482		339,047	
Starter Fertilizer	19,762 ac		114,600	30,000		120,000	
Brush Control	68,185 ac		238,600	62,621		219,174	
Dams	,		,	02,02	uc.	217,114	
Diversion	98		392,000	93		465,000	
Multipurpose (Shelby	1		400,000	,,		405,000	
Multipurpose	18		324,000	11		198,000	
Dikes and Levees	26,430 ft		21,100	93,903		75,122	
Diversion	181,627 ft		87,180	221,804		106,466	
Drainage	,		07,200	221,004	LLo	100,400	
Field Ditch	387,713 ft		77,542	389,505		77 001	
Main or Lateral	246,641 ft		192,380	276,411		77,901	
Farm Ponds	932		1,864,000	868	II.	172,756	
Fencing			568,700		-	1,432,200	
Floodwater Diversion	0		500,700	4,222,000	IL.	. 755, 000	
Floodwater Retarding Structure.	16		64,000	0 11		// 000	
Floodway	0 ft		04,000			44,000	
Grassed Waterways	538 ac		45,700	12,000	ac.	4,200	
Irrigation	330 ac		45,700	309	ac.	71,260	
Canal or Lateral	405,433 ft		324,346	386,035		200 000	
Ditch and Canal Lining	82,515 ft		763,264			308,828	
Field Ditch	905,946 ft		72,500	184,868		1,201,642	,
Land Leveling	11,321 ac		724.544	1,219,542		97,563	
Land Smoothing	2,250 ac		45,000			944,928	1
Pipeline	324,503 ft		1,298,000	2,122		70,557	
Storage Dams	14		175,000	350,740	it.	1,402,960	
Sprinkler Systems	201		703,500	16		240,000	
Land Clearing	721 ac			121		423,500	
Pipeline for Livestock Water.	447,117 ft		36,100 178,840	1,245		62,250	
Spring Development	316	•		518,700	ft.	220,448	
Streambank Protection	105,383 ft		205,600	385		231,000	
File Drain	33,492 ft.		447,877	181,488		1,025,407	
Tree Planting	JJ,492 IL.	•	51,600	37,773		113,319	
Farmstead and Feedlot	303 ac.		0.700		ac.	2,585	
Field Windbreak			9,700	330		23,100	
Trough and Tanks	326,424 ft. 775		7,500	542,729	ft.	16,282	
Water Control Structures	3,953		116,300	719		107,850	
Atterspreading			790,600	5,536		1,107,200	
Vells	5,881 ac. 211	•	379,324	5,479	ac.	328,740	
	411	-	358,700	169		287,300	
			312,060,222			\$12,771,441	

# MONTANA DISTRICT STATISTICS

District	Date Organized (Original)	Total Acres	Private Land (Acres)	Acres Under Agreement	District Cooperators (Number)	Operating Units (Number)
Beaverhead	5/4/50	3,593,882	2,000,000	1,404,590	179	310
Big Horn	8/22/44	3,221,120	2,858,360	1,194,286	240	588
Big Sandy	5/9/45	857,000	823,724	707,932	220	284
Bitterroot	11/4/41	1,525,760	369,536	195,173	346	998
Blaine	8/29/44	2,730,880	2,321,400	1,187,270	455	618
Box Elder	8/28/41	2,120,320	1,700,209	1,342,842	225	338
Broadwater	4/27/46	766,720	505,034	484,399	192	208
	5/6/48	1,324,800	977,853	365,394	374	749
Carbon	8/14/46	1,701,760	1,298,890	919,878	595	871
Cascade	7/7/43	1,651,800	1,616,722	1,043,921	359	668
Chouteau Culbertson-Bainville	12/20/40	1,395,200	1,303,321	574,797	307	595
	9/4/47	923,520	895,449	483,441	238	682
Daniels	8/7/45	1,497,600	1,357,113	1,077,820	430	572
Dawson	5/3/49	1,022,977	1,178,014	598,568	142	207
Deer Lodge Valley	2/8/45	1,060,358	390,678	188,083	192	251
Eastern Sanders	7/13/46	2,716,160	2.036.791	1,096,171	423	935
Fergus	4/13/45	3,289,600	438,070	126,667	327	1,088
Flathead	12/20/40	131,200	122,554	54.825	39	110
Froid	6/8/49	1,528,340	411,555	157,435	222	838
**Gallatin Valley	10/11/44	3,067,520	2.160.461	1,901,539	176	284
Garfield	8/11/47	1,903,360	1,591,112	637,073	192	404
Glacier		774,280	68,600	60,735	174	210
Green Mountain	11/4/41	1,109,120	411,177	255,212	111	145
Granite	1/4/54	1,872,640	1.604.412	1,406,165	403	849
Hill	4/17/46	1,288,140	544,813	351,003	167	294
Jefferson Valley	4/28/48	1,203,200	795,773	446,976	363	386
Judith Basin	10/1/47	912,934	320,000	178,504	515	1,236
Lake	7/18/45	2,218,204	1,000,974	860,569	234	335
Lewis & Clark	6/25/48		788,161	575,770	170	317
Liberty	2/28/50	933,760	250,430	132,166	331	287
Lincoln	7/9/43	2,377,600	991,325	819,696	207	336
Little Beaver	1/27/42	1,045,120		1,063,547	203	386
Lower Musselshell	6/21/43	1,920,640	1,353,953	380,198	123	159
Madison	12/18/46	938,602	503,520	1,171,998	385	519
McCone	8/14/42	1,660,160	1,497,221	696,550	59	145
Meagher	9/12/57	1,506,560	1,312,054	127,395	81	137
Mile High	2/7/52	458,240	181,295	127,373	01	-51

District	Date Organized (Original)	Total Acres	Private Land (Acres)	Acres Under Agreement	District Cooperators (Nimber)	Operating Units (Number)
Mineral Missoula North Custer North Fowell Park Petroleum Phillips Pondera Fowder River Sheridan Richland Rosebud Ruby Valley Stillwater Sweet Grass Teton Toole Treasure Upper Musselshell Valley Wibaux Yellowstone	11/3/44 5/8/46 6/20/44 4/28/49 6/8/49 10/4/51 9/20/45 12/17/53 1/1/40 9/17/40 4/13/42 12/11/50 6/9/54 3/31/50 10/8/47 12/27/47 7/19/46 6/14/50 6/21/45 1/16/46	782,720 1,673,320 1,673,320 772,649 940,696 1,763,820 1,056,640 3,346,560 1,051,520 2,102,400 1,221,600 3,168,580 1,022,135 1,150,080 1,181,440 1,248,000 629,760 992,640 3,175,040 568,960 1,686,409	54,830 486,670 213,949 437,920 762,959 958,311 1,795,333 914,469 1,681,920 934,770 1,126,312 2,787,529 500,000 852,992 914,609 1,024,905 1,058,470 563,258 932,985 2,350,000 531,980 1,686,400	19,814, 473,914 352,237 202,942 533,934, 877,232 1,771,243 459,345 963,096 566,259 735,014 2,081,759 542,005 373,300 718,229 546,335 794,464 504,669 742,110 1,368,061 441,136 619,131	50 239 102 71 198 96 283 321 151 369 540 248 137 189 227 344 251 121 116 361 185 443	59 509 132 68 465 110 621 610 387 758 766 382 200 489 286 745 421 129 188 887 215 1,228
			00,021,120	00,004,040	14,441	26, 994

<sup>\*\*</sup> AS A RESULT OF A PETITION AND HEARING THE THREE RIVERS SOIL AND WATER CONSERVATION DISTRICT WAS DISSOLVED AND THE TERRITORY COMPRISING THIS DISTRICT WAS COMBINED WITH THE GALLATIN VALLEY SOIL AND WATER CONSERVATION DISTRICT AND THE MEAGHER COUNTY SOIL AND WATER CONSERVATION DISTRICT ON JANUARY 18, 1968.

#### SUMMARY

Natural resources of Montana have an important bearing on its economy.

Natural resources support the following Montana industries:

Agriculture	-	\$500,000,000
Minerals & Oil	-	250,000,000
Forest Products	-	125,000,000
Tourism & Recreation	_	125,000,000

It is highly probable that agriculture will remain the predominant industry of Montana for many years to come. It is highly important to do everything possible to keep Montana agriculture competitive with other states and other nations.

The 58 Soil and Water Conservation Districts have been an important factor in helping Montana farmers and ranchers to develop and use the newest and best conservation techniques to improve agriculture practices to maximize income.

Since the District Law was passed by the Legislature in 1939, various amendments have broadened the activities of Districts.

The five elected land-occupier supervisors (plus two urban supervisors) of each District serve without pay. Their interest is to improve and conserve the soil, water, and related natural resources, not only for food production and industry, but for recreational enjoyment of all people as well.

These are some of the reasons why there should be continued support for the activities as reported in the Bi-Annual Report of the State Soil Conservation Committee.

